

In the Abstract:

Please add new Abstract of the Disclosure, on following page.

ABSTRACT OF THE DISCLOSURE

A method and device for operating MIMO air interfaces in mobile communications systems, according to which a radio signal is transmitted by a transmitting device via a MIMO channel comprising a number of m subchannels and is received by a receiving device having n antennas. Different polarizations are assigned to the signals to be transmitted on the subchannels, and the signals are supplied to a common antenna.